# MANUFACTURING EXTENSION PARTNERSHIP Success Stories from the Field

## Little Log Co., Inc.

**Nebraska Manufacturing Extension Partnership** 

The Little Log Company Is Flying High on the Wings of Lean

#### **Client Profile:**

The Little Log Company, located in Sargent, Nebraska, is a manufacturer of decorated wooden birdhouses. The company specializes in custom design and decorating for its diverse customers, including schools, individuals, and John Deere. Little Log is Nebraska's largest manufacturer of birdhouses and bird feeders; it employs 20 people.

### Situation:

As Little Log's business continued to grow, the company found its facilities were no longer big enough to accommodate production. Birdhouses in all stages of completion perched wherever employees could find space for them. Stock-outs on fabricated wood became the norm. Excessive handling and inadequate storage damaged products and materials, which then required rework. Orders were shipping late. Little Log decided to expand and asked the Nebraska Manufacturing Extension Partnership (NMEP), a NIST MEP network affiliate, to perform an assessment of the company as part of its financing process.

#### Solution:

NMEP's assessment recommended that Little Log cancel its plans to expand and instead send a representative to attend an NMEP Lean Manufacturing 101 class. By learning the concepts and implementation techniques of lean, the company could solve its storage issues without a costly building expansion.

Little Log and NMEP worked together to introduce lean practices to the company's facility. First, the majority of the employees participated in NMEP's Lean Manufacturing 101 training class. Next, a core group of key employees worked with NMEP to develop a value stream map for a selected product line. While completing this map of existing processes, the team's members identified considerable waste in the current method of manufacturing and created an action plan to eliminate non-value-added activity while streamlining processes.

With guidance from NMEP, the Little Log team assigned specific locations and space for cut wood components, finished product, tools, and shipping supplies, and developed a kanban system to manage the replenishment of materials. Next, the team reorganized the wood room, creating designated aisles and equipment storage locations to improve flow. Then Little Log set to work organizing the workspace according to the lean principles of sort, set in order, shine, standardize, and sustain (5S). NMEP and Little Log reconfigured the house assembly area, finishing area, and shipping area to create optimum flow. Now, Little Log has a place for everything, and everything is in its place. The company has enough space to accommodate a demanding production schedule, and it avoided the cost of an expansion.

### Results:



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- \* Improved response to customer demand.
- \* Reduced work-in-process by 50 percent.
- \* Reduced rework rate.
- \* Eliminated stock-outs in the wood room and reduced stock-outs of painted product.
- \* Improved vendor relations.
- \* Improved morale.
- \* Added 4 additional product offerings without any major plant expansions.

#### **Testimonial:**

"The improvements made by the Nebraska Manufacturing Extension Partnership's lean manufacturing training have been great. Implementing the kanban system made the biggest improvement in efficiencies. That has cut down on inventory of parts and allows the employees to feel as if they are in control. After the employees completed their training, we gave them complete control of the layout of their areas. That in turn gave them ownership of their areas, which also increased productivity. All of the changes made because of the training have resulted in happier and more productive employees." Duane A. Ruh, President

